## **CLAIMS**

## What is claimed is:

- 1. A client-server scheduling method, comprising:
- (a) a first phase of scheduling on a client to set real-time deadlines for tasks for a server coupled to said client; and
- (b) a second phase of scheduling on said server of subtasks of said tasks, said second phase of scheduling using the real-time deadlines of step (a).
- 2. The scheduling method of claim 1, wherein:
  - (a) said tasks include a media stream decoding; and
  - (b) said subtasks include a frame decoding for frames of said media stream.
- 3. An object request broker method for a client-server system, comprising:
  - (a) collapsing a first client request return and a second client request call; and
- (b) chaining an output of a first server object to an input of a second server object where said first server object and said second server object correspond to first and second client requests, respectively.
- 4. The method of claim 3, wherein:
- (a) said chaining is by creation of a buffer for intermediate results (output of said first object and input for said second object) in said server.
- 5. A method of server processor memory management in a client-server system, comprising:
  - (a) allocate a first portion of a processor memory to processor overhead; and
- (b) allocate a second portion of said processor memory to task workspace wherein said second portion can be occupied by only a single task at a time.

- 6. The method of claim 5, wherein:
- (a) said second portion of memory includes a stack component, a persistent memory component, and a non-persistent memory component.
- 7. A method of data flow in a heterogeneous system with a bus connected to a control processor and to each of a plurality of processing elements, comprising:
- (a) transferring data among said processing elements by use of a common memory separate from said bus.